

ANNUAL REPORT

ON THE

SANITARY CONDITION

OF

PUDSEY

FOR THE YEAR 1898,

BY

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MEDICAL OFFICER OF HEALTH.

PUDSEY :

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List of Members of the Sanitary Committee,
1898.

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PUDSEY

Urban Sanitary Authority.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH.

MR. CHAIRMAN AND GENTLEMEN,

I herewith beg to present my Report on the Health of the District during the year 1898.

Pudsey comprises an area 2,409 acres.

The Population in 1891 (census) was 13,444.

The Population for April, 1896, (local census) was 13,995.

The Population for July, 1898, (local census) was 14,585.

The Rateable Value for General District purposes was £45,013.

The Rateable Value for Poor Rate purposes was £51,823.

The Poor Rate 2s. 6d.

The District Rate 3s. 6d.

The Town is divided into Five Wards.

Industries.—There are 30 mills or factories in the town. The chief trades of the place are woollen and worsted (18 mills), ironworks (3), tanning (2), boot-making (1), cabinet-making (3), fender-making (1), mineral water making (3).

Topography.—The district is roughly pear-shaped, the stem end being West and the broad end East. It is bounded on the North by the Urban Council Districts of Calverley and Farsley and the City of Leeds; on the East by Leeds; on the South by Leeds and the Urban Council District of Tong; on the West by the City of Bradford.

The subsoil consists of clay, clayey loam and shale.

Altitude.—The height above the sea level varies from 225 ft. at Houghside to 625 ft. at Greentop.

CENSUS OF PUDSEY—Taken July 1898.

(AREA, 2,409 ACRES).

WARD.	HOUSES		POPULATION			Percentage of Children under five years of age.	Average Number of Inhabitants in each House.	Percent- age of Empty Houses.	Average Density of Population per acre.
	Inhabited	Empty	Total Number	Number under five years of age.	Number above five years of age.				
NORTH	754	18	3319	403	2916	12·1	4·4	2·3	
SOUTH	649	54	2648	312	2336	11·8	4·0	8·3	
EAST	738	34	3128	343	2785	10·9	4·2	4·6	
WEST	633	37	2592	280	2312	10·1	4·0	5·8	
CENTRAL	747	23	2898	296	2602	10·2	3·8	3·0	
TOTAL	3521	166	14585	1634	12951	11·0	4·0	5·4	6·05

Comparative Figures for Previous Years.

1871			12173						5·0
1881	2769	403	12314				4·4	12·6	5·1
1891	3095	314	13444	1368	12076	10·1	4·3	9·2	5·5
1896	3299	265	13995	1194	12501	10·6	4·2	7·4	5·8

Vital Statistics.—Calculated on the **Population** numerated July 1898, 14,585

The Births registered during the year numbered 373 (males 173, females 200, giving a **Birth-rate of 25.5 per 1000.**

The Deaths for the year numbered 263 (males 130, females 133), giving a **Death-rate of 18.03 per 1000.**

The Deaths of Infants under one year of age numbered 53, and, calculated on the number of children whose births were registered during the year, give an **Infantile Death-rate of 142.**

The Deaths from the seven principal Zymotic Diseases, namely, small-pox, measles, scarlet fever, diphtheria, and membranous croup, whooping cough, "fever" (typhus, simple, continued and enteric) and diarrhoea, numbered 31, giving a giving a **Zymotic Death-rate of 2.1 per 1000.**

There were 37 deaths from bronchitis, pneumonia and pleurisy, giving a **Respiratory Death-rate of 2.5 per 1000.**

There were 19 deaths from Phthisis, giving a **Phthisis Death-rate of 1.3 per 1000.**

Deaths registered as due to old age—10.

Deaths above 80 years of age—7 (the oldest being 88).

Deaths from injury—2.

Suicides—5. (2 hanging, 2 drowning, 1 cutting throat).

Inquests held—16.

Uncertificated deaths registered—0.

Illegitimate births registered—14.

Still-born children buried in the Cemetery—39.

The Death and Birth Returns are obtained from the Registrar every week with unfailing regularity.

England and Wales.—1898, Birth-rate 29.4; Death-rate, 17.6; Zymotic Death-rate, 2.22; Infantile Death-rate, 161 per 1000 births.

TABLE A.—The following Table shows the Births ; Total Deaths ; Deaths from Zymotic and other classes of diseases, etc., for the last seventeen years. Some of the spaces are blank for want of information.

	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
Births	...	390	343	374	351	332	323	311	347	326	352	356	367	417	412	404	373
Deaths	...	259	235	216	259	251	291	313	294	294	226	254	203	253	259	234	263
Infants under One Year	71	74	59	51	54	60	43	80	60	45	53
Phthisis	...	23	20	24	27	22	32	25	21	13	17	23	16	12	22	23	19
Seven Zymotic Diseases	...	41	54	40	40	23	26	57	23	27	14	43	9	28	32	21	31
Small Pox	...	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Measles	...	9	4	8	8	3	3	34	0	1	4	8	0	1	19	2	3
Scarlet Fever	...	4	6	5	11	10	1	1	0	4	1	1	5	1	0	1	4
Diphtheria & Membranous	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup	...	4	4	6	5	1	4	4	3	2	1	3	1	1	4	1	6
Whooping Cough	...	6	3	0	8	0	15	0	4	14	0	0	0	0	7	1	0
Diarrhoea	...	7	31	18	12	5	1	12	4	3	2	25	2	22	0	14	11
Fever	{ Typhus Enteric (Continued)	12	5	3	3	4	2	6	12	3	6	5	1	3	2	2	7
	
Chest Complaints	{ Bronchitis Pneumonia Pleurisy	46	63	56	51	66	86	72	93	89	51	44	38	41	45	38	37
Heart Disease	...	17	...	10	13	18	13	21	19	19	13	14	10	24	22	29	19
Injuries	...	5	...	7	7	6	3	10	8	11	6	9	6	5	4	5	2
Cancer	8	12	7	12	16	7	14	13
Diabetes	0	1	1	2	1	4	3	4

The Birth-rate for the year was abnormally low. Why this was so, I cannot explain; but it may have some relation to the large number of still-born children that were buried in the cemetery. There were 39 buried in 1898, and the numbers for previous years were 16 in 1891, 21 in 1892, 15 in 1893, 26 in 1894, 19 in 1895, 24 in 1896, 19 in 1897. The regulations as to disposal of the bodies of still-born children are very lax, and open the door to irregularities.

The **Death-rate** during the year was 18.03 per 1000. In comparison with some recent years it is unfavourable, but death-rates for small populations and for short periods, such as for one year, are liable to fluctuations which are not important. It is safer to compare the rates for groups of years if we desire to fairly estimate their value. For such purpose the following Table is useful:—

Year.	Birth-rate.	Death-rate.	Averages of Annual Death- Rates.	Infantile Death- Rate. Children under 1 year.	Zymotic Death- Rate.	Phthisis (Con- sump- tion) Death- Rate.	Respiratory Death-rate (Pleurisy, Pneumonia, Bronchitis.)
1874	—	1880	23.9				
1881		17.4					
1882		20.8	20.2		3.3	1.8	3.7
1883	31.2	18.7			3.7	1.6	5.0
1884	27.4	20.5			2.7	1.7	4.4
1885	28.1	16.9			1.6	1.8	4.0
1886	27.0	20.6			2.8	2.1	4.3
1887	25.7	19.6			1.6	1.7	5.0
1888	24.1	22.2		219	1.6	2.4	6.5
1889	23.1	23.7		238	4.0	1.8	5.4
1890	26.7	21.1	17.8	170	1.5	1.5	6.9
1891	24.2	21.8		156	1.9	.9	6.6
1892	25.9	16.6		153	1.03	1.2	3.7
1893	25.9	18.4		168	2.8	1.6	3.2
1894	26.4	14.6		117	.7	1.1	2.2
1895	29.5	17.9		191	1.9	.8	2.9
1896	29.4	18.5		145	2.2	1.5	3.2
1897	28.4	16.4		111	1.4	1.6	2.6
1898	25.5	18.03		142	2.1	1.3	2.5

The deaths of infants under one year of age—infantile mortality—shows an increase as compared with the previous year, but compared with former years may be considered favourable. As may be seen from page 5 the infantile death-rate for the whole of England and Wales 161 ; for Pudsey 142.

Table showing deaths at different age periods, 1898.

Under 1 year.	1 to 5 years.	5 to 15 years.	15 to 25 years.	25 to 65 years.	Over 65 years of age.	Total.
53	32	9	7	102	60	263

Comparative Mortality of the Five Wards, 1898.

WARD.	NUMBER OF DEATHS IN EACH QUARTER				TOTAL DEATHS.	DEATH-RATE FOR YEAR.
	1	2	3	4		
NORTH ...	13	17	22	17	69	20.7
SOUTH ...	10	16	8	8	42	15.8
EAST ...	16	10	13	9	48	15.3
WEST ...	10	16	15	16	57	21.9
CENTRAL ...	9	14	10	14	47	16.2

Uncertified Deaths.—Deaths not duly certified by registered medical practitioners, or by the Coroner are almost unknown in Pudsey. This is satisfactory to record.

Infectious Diseases.—The record for the year was unfavourable. Measles and whooping cough visited the town several times during the year, but did not spread much. On the other hand the notifiable diseases, (see page 9), were unusually prevalent especially the three principal diseases, scarlet fever, diphtheria, and typhoid fever. It is some slight satisfaction to learn that this increased incidence of diseases was not confined to our district, but extended over the County Council area.

The Infectious Diseases (Notification) Act, 1889.—

This Act was adopted by the Council and came into force on April 1st, 1895.

Cases Notified in 1898,

Quarter.	Age.	Small-pox.	Cholera.	Diphtheria	Croup.	Erysipelas.	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	Total.
1st	Under 5				1		6			34
	Over 5					6	14	6	1	
2nd	Under 5			3	1		1	1		34
	Over 5			9		5	7	7		
3rd	Under 5			3	1		2			39
	Over 5			5		4	15	9		
4th	Under 5						5	1		49
	Over 5			1		5	7	30		
Whole Year	Under 5			6	3		14	2		25
	Over 5			15		20	43	52	1	131
Total Cases ...				21	3	20	57	54	1	156
Deaths ...				2	3		4	7	1	17
Percentage of Death ...				9.5	100	0	7.0	12.9	100	10.8
Removed to Hospital ...				14			48	23		85
Percentage of cases removed to Hospital ...				66			84	42		54

Small-pox.—There was no case reported during the year.

Pudsey Vaccination Returns for the Year 1897.

Number of Births registered from Jan. 1st to Dec. 31st.	Successfully Vaccinated.	Insusceptible.	Dead Unvaccinated.	Postponed by Medical Certificate (A).	Removed to Places.		Not finally accounted for (D).	Percentage of Unvaccinated children including columns A, B, C, D.	Conscientious Objection.
					Known (B).	Unknown (C).			
413	338	1	26	2	2	8	35	11.3	1

This Table may be compared with the number of Unvaccinated Children, 11.6 p.c. in 1890, 12.7 p.c. in 1891, 10.4 p.c. in 1892, 7.2 in 1893, 6.7 in 1894, 7.8 in 1895, and 5.7 in 1896.

Referring to column 3 in above table, I may remark that with over twenty years' experience as a private and public vaccinator I never have met with an infant insusceptible to primary vaccination. The Local Government Board's own vaccinators for a period of some sixteen years, and having concern with no less than 95,677 consecutive primary vaccinations, have met with no single case of "insusceptibility."

In 1889 a Royal Commission was appointed to inquire into the subject of Vaccination. The Commissioners, fifteen in number, were all eminent men, and represented every side of the vaccination question. They heard evidence from all over the world, for and against vaccination. They examined 187 witnesses, the majority of whom represented the case against vaccination. To thoroughly investigate the subject, they sat for seven years, and during that period every severe outbreak of small-pox was the subject of special inquiry, and experts reported on every case that came to their notice in which death or non-fatal injury was alleged to be in any way connected with vaccination.

The following are, briefly summarised, the conclusions arrived at by the Royal Commission :

1. Vaccination protects against small-pox, and renders it less fatal.
2. It is not safe to replace vaccination by any other system, such as isolation in hospital, and disinfection, for protection against small-pox.
3. The protective effect of vaccination gradually wears out and re-vaccination after 9 or 10 years is desirable.

4. The injurious effects alleged to result from vaccination are infinitesimal, and can be abolished altogether by the use of calf lymph, and precaution as to cleanliness, etc.
5. The value of vaccination depends upon the efficiency of the operation. In the case of a first vaccination four good "marks" give good protection, while that obtained from one or two marks is feeble.

Suggestions, founded on the above conclusions, were made by the Commission, and most of them are embodied in the 1898 Vaccination Act, an experimental Act to be in force for five years. The principal changes under the new Act are : -

- 1.—The age of Vaccination is extended to six months.
- 2.—The Public Vaccinator is to vaccinate at the homes of the children.
- 3.—The Public Vaccinator is to use glycerined calf lymph, provided and guaranteed by the Government.
- 4.—Within four months of the birth of a child a parent can by making a conscientious objection get exemption.

Up to January 1st, 1899, only two persons claimed exemption in Pudsey. This in my opinion speaks well for the sturdy good sense of the people.

It may be accepted as a fact that a large number of persons are "conscientious objectors" not because they come to any logical or conscientious conclusions as to the value of vaccination, but because they are by nature hysterically emotional and in consequence are easily led astray. That being so they are no more to blame than the simple-minded credulous dupes of such sharpers as fortune-tellers, water-diviners and quacks.

Scarlet Fever prevailed extensively during the year. No month was free from it. There were 57 cases, causing four deaths. It may be asked why the disease spread when we had an efficient hospital for isolation ? In reply, I may say that 48 of the cases were promptly removed to the hospital and the infected houses carefully disinfected. The nine cases that remained at home were kept under supervision and well and carefully isolated also, and I do not know of a case that spread from them. Yet fresh cases kept cropping up regularly during the year. A short account of three of the cases removed to the hospital will, I think, explain the reason. Case 1.—Mr. Lobley, the School Attendance

Officer, reported a case of a lad who was peeling after having suffered from a "sore throat" a few days previously, for which no medical advice had been sought. I visited the house at once, and found that the boy was in the most infectious stage of scarlet fever, and had him at once removed to the hospital. Unfortunately he had already infected another member of the same house, who developed virulent scarlet fever the next day, which resulted in his death. Every credit is due to Mr. Lobley for his vigilance and knowledge. It is obvious that if this boy had been allowed to attend school without the disease from which he suffered being found out, many of the other children would have been infected, and possibly some of them would have died. Case 2.—A child who came to the surgery of one of the medical men in the town to have a tooth taken out, was noticed to be "peeling," and on inquiry a history of previous sore throat was elicited. The case was at once removed to the hospital. This child had had a mild attack of scarlet fever, and had attended school. Cases of scarlet fever had been notified regularly every few days from amongst the children attending this particular school. After removal to the hospital of the child referred to, no fresh cases were notified, and it is reasonable to assume that this child was, unwittingly, infecting the other children in the school. Case 3.—A child with scarlet fever was removed to the hospital from a house containing several other children, and the necessary stoving, &c., had been done to disinfect the house. Five days after another case was notified from the same house. As it was not likely that the case removed to the hospital had infected this second case, further inquiry was made, and it came out that another of the inmates, a lad working in a mill had had a slight attack of "quinsy" a fortnight before. This lad was examined, and his skin found to be peeling, he also was removed and no other case occurred. If the nature of this boy's disease had not been ascertained, and it was only found out by accident, there is little doubt that all the other children in the house would have caught scarlet fever from him.

From consideration of the above cases, it will be seen that it is not from cases notified, and isolated, that scarlet fever spreads, but from cases that we do not know of.

The diffusion of popular knowledge as to the nature of scarlet fever, and possibly the enforcement of the Notification Act in its dual aspect, might lessen the number of those hidden cases.

Enteric or Typhoid Fever.—This dangerous disease attacked the town severely during the year. There were 54 cases and 7 deaths. Twenty-three cases were treated in hospital. The cases that remained at home were supplied with special fever pails, and extra cleaning of the midden was carried out.

With reference to typhoid fever, Dr. Kaye, County Medical Officer, in his last annual report remarks: "This disease is of peculiar interest to the sanitarian because its incidence so frequently denotes defective sanitary arrangements, while its continued absence from a district may be looked upon as the reward of efficient sanitary defences," and "in my opinion the privy midden, by reason of its liability to infection, its suitability for propogating the typhoid bacillus, and the dangerous method of removal of its contents would account for many of the cases."

In my last report I alluded to experiments conducted by the Local Government Board, which showed that the germs (bacilli) of typhoid fever flourished and multiplied in soil polluted by animal organic matter, such as the filth that soaks into the ground from privy-middens, the leakage from defective drains, and the liquid that is washed into the soil from the dirty porous surfaces of badly kept streets and yards. On the other hand pure virgin soil was found to be unfavourable to the growth of the germs, and that they soon disappeared from it.

From these experiments we would expect to find typhoid fever prevalent in districts where the above insanitary conditions exist. Experience proves that it is so, the disease is seldom long absent in such places. Scattered cases appear from time to time with great regularity. Perhaps in a particular year there are very few cases, on the other hand there are epidemic years when an exceptionally large number of cases occur. This is also what the natural history of the disease would make us anticipate. The germs of typhoid fever are really a low form of plants, fungi, and in their habits of growth behave like other similar plants, for example take a larger fungus, the common mushroom. In fields that contain the spawn we can gather a few mushroom nearly every year at the proper season, but occasionally they are absent for a year, and in other years they grow in such abundance that the ground is almost white with them. This difference apparently depends on certain weather conditions of heat and moisture being

favourable or otherwise to their growth. In the same way it is probable that the development of the typhoid fever fungus is stimulated or retarded by the state of the season as to heat, wetness, etc.

These germs in the ground are potential for evil. They are the suds of death and disease, buried but ready to grow under suitable influences.

From the above the necessity for preventing the pollution of the soil is obvious if the town is to be kept healthy.

Epidemic Diarrhœa.—This is a “filth disease” like typhoid fever, and probably engendered in the same way. Judged from the number of cases and the number of deaths it is a more formidable disease than typhoid fever. The cases in the Autumn of 1898 were very numerous and resulted in 14 deaths.

It is interesting to note that the 4 feet ground temperature never exceeded 54° F.

Diphtheria.—This disease is fortunately a rare one in the district, and the number of cases in 1898 was unusually large 21, or with three cases of membranous croup 24. The advantage of an isolation hospital was proved in dealing with the cases. In April nine cases, verified by cultures, broke out in one family. One of them died, and the rest of the family were removed to the hospital, and no more cases occurred. In September six cases broke out within a few days in three houses close together, one case died, and the remaining five were sent to hospital, where another of the cases soon died. There was no spread of the disease in the district.

Calverley Joint Hospital Summary for 1898.

	Scarlet Fever.	Enteric Fever.	Diphtheria.	Admitted.	Discharged	Died.
Pudsey ...	48	23	14	85	70	10
FARSLEY ...	6	3		9	7	1
CALVERLEY ...		1		1	1	
ECCLESHILL ...	4	5		9	9	2
IDLE ...	5	6	1	12	5	3
Total ...	63	38	15	116	92	16

Table showing Total Admissions and Deaths for each year since the Hospital was opened :—

DISEASES.		1891 (2 months)	1892	1893	1894	1895	1896	1897	1898	Total.	Deaths per cent.
SCARLET FEVER	Admitted	15	117	67	88	14	16	22	63	402	4.9
	Died		7	1	3	1	1	1	6	20	
ENTERIC FEVER	Admitted	2	7	24	14	16	16	14	37	130	17.0
	Died		2	3	1	1	4	2	9	22	
SMALL-POX	Admitted			55	11					66	4.5
	Died			3						3	
DIPHTHERIA	Admitted	1		3	2	9 some doubt- ful	1	2	16	34	5.8
	Died			1					1	2	

Disposal of Sewage and Refuse.—The purity of the air, soil, and water of a district is maintained by efficient **scavenging** or cleaning, and the health of the inhabitants depends on the purity of the air, soil, and water; therefore, the proper scavenging of a town is the most important duty of a sanitary authority. I have pleasure in reporting that the scavenging of the Council's district has been gradually improving for some years, and has never before been so well done as it is now. However, there is still room for great improvement; but this much-to-be-desired change for the better cannot come about as long as the primitive, disgusting, expensive, dangerous privy-midden system exists. In my report for 1897, I went rather fully into the disadvantages of the **dry system** (privy-midden) of removal as compared with the **water carriage system** (water-closets, drains, &c.). It is not necessary for me to go over the same ground again. That the question is gaining a fair share of attention, and is of great practical importance, is shown by the prominent position the matter occupied in the local Incorporation Inquiries held at Pudsey and Shipley, and in the Extension Inquiry held at Bradford

during the year. The learned gentlemen who conducted the inquiries, as well as the various sanitary experts associated with them evidently considered that the adoption of the water carriage system denoted progress in a town.

The Pudsey Sanitary Authority made a praiseworthy concession during the year by abolishing the charge for the water used for flushing closets. The charge had an undoubted effect in retarding the adoption of water-closets, and the public-spirited action of the Council has already stimulated sanitation. The water-closets in use are rapidly increasing. I may here remark that another tax on sanitation, the charge for baths, has also been done away with.

The following figures indicate the number of privies, water-closets, etc., in the district at the end of 1898. When we consider that eight or nine years ago the adoption of water-closets was discouraged in every way by the Sanitary Authority, and that the few that were in use were only connived at, the progress in this branch of sanitation is extremely gratifying :

PRIVIES	{	ORDINARY ...	2057	}	2091
		PAIL CLOSETS ...	34		
WATER-CLOSETS	{	ORDINARY ...	206	}	391
		SLOP-CLOSETS ...	115		
		TROUGH-CLOSETS	60		
ASHPITS	{	COVERED ...	783	}	1156
		UNCOVERED ...	373		
DUST-BINS ... ..		...	...		77

A public urinal was placed in Radcliffe Lane during the year. More are needed in different parts of the town.

The powers possessed by sanitary authorities with regard to the enforcing of water-closets is unsatisfactory, and fresh legislation dealing with the subject is urgently needed. But apart from the legal aspect of the question, it seems only just that if an authority, either voluntary or otherwise, has undertaken the scavenging of its district, and has provided efficient sewers and sewage works, it should, at any rate in the case of new buildings, and of old ones that can only be improved by reconstruction, be able to prescribe the apparatus or arrangement, which, in addition to being best for health, would enable the authority to fulfil its responsibility in the best manner, and with the least trouble and cost. Obviously this would be no injustice to the property owners, and would be beneficial to the district in general.

Sanitary Conveniences of Factories. — The following is from my last year's report :—" Anything that can be said against privy-middens, and in favour of water-closet, may safely be emphasised with regard to the sanitary conveniences of buildings where a number of persons assemble, such as factories, schools, Sunday-schools, clubs, public-houses, &c. There are, as a rule, no ashes to even partially cover and deodorise the excreta, as in the case of dwelling-houses, and therefore the contents of such middens are much more offensive, and the emptying of them is more loathsome. There is also the risk that the users of them, coming from different houses, may be suffering from some infectious disease. The Chief Inspector of Factories, Dr. Whitelegge, in his First Annual Report, drew attention to the bad state of factory conveniences in many places, and especially referred to those of the West Riding."

The Factory Act, 1878—Section 4—provides that "any default with regard to drains or sanitary conveniences in a factory shall be reported by the Factory Inspector to the Sanitary Authority, and the Sanitary Authority is obliged to take action to remedy the default."

The Factory Act—1891—Section 2, and Factory Act, 1895—Section 3—provides that "when notice of any act, neglect, or default is given by an Inspector under the said Section 4 to an authority, and proceedings are not taken within one month for punishing or remedying, the act, neglect or default, the Inspector may take the like proceedings for punishing or remedying the same as the Sanitary Authority might have taken, and shall be entitled to recover from the Sanitary Authority all such expenses in and about the proceedings as the Inspector incurs."

' In pursuance of the above Section, the Council received several letters from Factory Inspectors during the year, calling the attention of the Council to the insufficiency and insanitary condition of the sanitary conveniences of several of the factories in the district. With the Surveyor I made an inspection of the factories complained of, and of others in the town. We found that the complaints of the Inspectors were fully justified, the accommodation of many of the factories being primitive, insufficient, offensive, and dangerous to health.

A few of the factories have efficient modern sanitary arrangements."

“The Council communicated with the defaulters complained of, and in some cases issued notices, but at the end of the year the sum total result towards amendment was that one millowner, more interested in sanitation than the others, definitely promised to fully carry out, with as little delay as possible, the wishes of the Council.”

“It is difficult to understand how men, well-to-do or wealthy, who in their own domestic arrangements take advantage of every sanitary improvement, regardless of cost, can, without shame, allow their workpeople, men and women, to have the use of sanitary conveniences which are repulsive and dangerous to health.”

At the end of another year I regret that I cannot report much more progress. In one factory three exceptionally bad privies were replaced by five water-closets. Much more decided improvement in this branch of sanitation may be safely anticipated during the present year, 1899.

Sanitary Conveniences in Schools.—The privy-midden system in schools is intolerable. It is indecent, disgusting, and altogether inconsistent with the hygiene taught in the schools. It is undoubtedly a danger to the health of the scholars. Some of the users of the closets may themselves be suffering from undetected infectious diseases, or may come from homes where infectious disease exists. As there are no ashes to cover the excreta, it is the dangerous custom in some of the schools to put the sweepings from the floors of the school-rooms into the middens. As these sweepings may contain the germs of scarlet fever, whooping cough, measles, consumption, the spores of ringworms, &c., &c., the danger of such a procedure is obvious, and it should on no account be permitted. The Pudsey School Board, recognising the evils of the midden system have, as a beginning to the work of reformation, abolished the privy-middens in the Greenside School and substituted an entirely new system of water-closets, urinals, and drainage. The change for the better cannot fail to be appreciated, and I trust the unhealthy conveniences of the other schools will be speedily dealt with in a similar way.

Cesspools.—Public Health Act, 1875, sect. 42, enacts “that a sanitary authority *may* and when required by order of the Local Government *shall* themselves undertake or contract for the removal of house refuse from premises, and the

cleansing of earth-closets, privies, ashpits, and cesspools either from the whole or any part of their district."

Sect. 43 goes on "If a sanitary authority who have themselves undertaken or contracted for the removal of house refuse from premises, or the cleansing of earth-closets, privies, ashpits and cesspools fail without reasonable excuse after notice in writing from the occupier of any house within their district requiring them to remove any house refuse or to cleanse any earth-closet, privy, ashpit or cesspool belonging to such house, or used by the occupiers thereof, to cause the same to be removed or cleansed as the case may be within seven days they will be liable to pay to the occupiers of the house a penalty not exceeding five shillings for every day during which such default continues after the expiration of the seven days."

The Medical Officer of Health for Pudsey in his Annual Report for 1882 having represented that the system of removal of refuse was unsatisfactory, the work being done by individual occupiers, the Local Government Board (May, 1883) wrote to ask what steps the Pudsey Sanitary Authority had taken to improve it?

After some correspondence between the Local Government Board and the Sanitary Authority on the subject, the following resolution of the Sanitary Committee (Nov. 7th) was adopted by the Local Board:—"That the committee recommend to the Board that the Board themselves undertake the removal of night-soil, house refuse, &c., within the District of the Board."

On November 12th, 1883, the following communication was sent to the Local Government Board "with reference to the removal of house refuse, &c., within the Board's District, I am to state that the Board have adopted recommendations made to them on this subject by the Sanitary Committee. The system as recommended and agreed upon is that in the first instance the Board shall themselves undertake the removal of such refuse."

The owners of four houses built in 1897 and draining into one cesspool (10ft. 6in. deep) in July, 1898, asked the Council to cleanse the cesspool. They made this request understanding that the Sanitary Authority had in 1883 undertaken the removal of house refuse, &c. (Sect. 42, P.H.A., 1875.) The Council replied that they had not undertaken to cleanse cesspools, and in their turn served the

occupiers of the houses referred to with a notice ordering them within 24 hours to abate the nuisance caused by allowing the contents of their cesspool to overflow or soak therefrom (Sect. 47, P.H.A. 1875.) They also were reminded of the penalties for not complying with the order of the Council. As the nuisance was not abated within the time named the Council employed men to clean out the cesspool and charged the cost to the occupiers—11s. 3d. The property owners wrote and explained the circumstances of the case to the Local Government Board, and, in reply, were informed, “with reference to the emptying of a cesspool on certain property I am to draw your attention to Sect. 47, P.H.A., 1875, and to state that the Board have not issued any order under Sect. 42 of the Act, requiring the Urban District Council of Pudsey to undertake such work.”

This decision of the Local Government Board, in connection with the action of the Local Board in 1883, would seem to imply, either, that a sanitary authority who of their own free will undertake the scavenging of their district (Sect. 42, P.H.A., 1875) are not liable under Sect. 43, whereas they are responsible if they undertake it by order of the Local Government Board; or perhaps that the words *et cetera* in the resolution of the sanitary committee are not to be taken as including “earth-closets, privies, ashpits and cesspools,” but as relating to affairs not referred to in Sect. 42.

I consider that the circumstances related have an important bearing on the health of the town. If a sanitary authority is under no obligation to undertake the trouble and expense (about 10s. each time for each cesspool) of cleansing the cesspools there is a possibility that facilities may be afforded for the construction of cesspools in order to avoid the moral, if not legal, responsibility of providing sewers for the removal of refuse.

Unless under certain conditions, such as in the case of a large house in the country standing in extensive grounds, cesspools are justly condemned as being dangerous to health. “When however houses are more closely crowded together and the plot of land attached to each is of size insufficient to utilise the sewage by its application to the soil the cesspool system is liable to become an unmitigated nuisance” (Corfield) “These receptacles for filth are so evidently undesirable in the neighbourhood of houses that it is the practice now in nearly all towns to fill them in” (Parkes).

I cannot get any accurate information as to the number of cesspools in Pudsey, there is certainly a large number, but as most of them are seldom or never emptied their very position is forgotten. The Local Government model bye-laws require that a cesspool, where one is unavoidable, must be at least 50 feet away from a dwelling; that it should not communicate with any sewer; that it should be absolutely water-tight; carefully covered in; and properly ventilated. I think I may say that none of the Pudsey cesspools comply with these conditions. I have heard of bricks being left out of newly built cesspools so that the liquid filth could drain away; and of another one in which for a similar purpose an outlet was made about a yard from the top.

The cleansing of cesspools cannot be properly carried out by private individuals. Special appliances are required, and experience proves that the cleansing instead of being regularly done is systematically neglected.

With regard to cesspools the duty of a Sanitary Authority, for the protection of the public health, is

1—To do away with old cesspools when possible.

2—Not to sanction the construction of new ones unless under exceptional circumstances, at the same time taking every care that the model bye-laws are strictly complied with.

3—To regularly cleanse them.

Main Sewering.—Mr. Jones, the Surveyor, has furnished me with following particulars.

The following is the length of main sewers now laid in the district.

	No. OF YARDS.
From Top of Bankhouse to Fartown	167
„ Top of Green Lane to Top of Fartown (<i>via</i> Green Top)	205
The length of Green Lane is	109
„ „ „ Carlisle Road	87
„ „ „ Fartown from White Cross to Fulneck End ...	885
From Fulneck End to Littlemoor Road	335
„ Roker Lane to Top of Lumby Lane	112
„ Top of Lumby Lane to Valley Road	495
„ Top of Valley Road to Tanks	1443
„ Nesbit Hall to Bankhouse Mill	382
„ Spring Wood House to Cliff Mill	287
„ Cliff Mill to Wesleyan Chapel (through fields) ...	418
„ Lumby Lane across fields to Roker Lane and Kettle Row	1148
„ Royal Hotel to Dr. Hunter's (<i>via</i> Station Road) ...	333
„ Top of New Street to the bottom	670
„ Upper Moor to the Bottom of Radcliffe Lane... ..	1007
„ White Cross to Station Road (<i>via</i> Greenside)	95

	No. of YARDS.
From Waver Green to Cliff Mill	1000
The length of Manor House Street	72
From Lidget Hill to Lane End (<i>via</i> Lowtown)	400
„ Church to Waver Green (<i>via</i> Church Lane	468
„ Upper Moor to Waterloo and the Tanks (including Gibraltar Lane and Bradley Lane)	1993
„ Bottom of Westroyd Hill to Greenside (<i>via</i> Smalewell Road)	345
„ Smalewell Road to Central Hotel (<i>via</i> Greenside)	243
The Length of Westdale sewer	787
From Primrose Hill to Richardshaw Lane (including Varley Street)	707
„ Bottom of Marsh Lane to Top	387
Part way up Mill Hill	30
Cemetery Road from Alcoates to Prospect Mills, joining Westdale sewer	107
The Old sewer along Cemetery Road	607
Richardshaw Lane (1898)	980
Total	16,304

The cost of the above was £17,700.

The lengths of Sewer yet to be constructed, are :

Fulneck...	yards—900
Mount Pleasant Road...	„ 620
Stanningley	„ 2209
Crimbles	} . . . „ 1255
Hough Side Road...}	

The plans and specifications for Crimbles and Hough Side Road Sewers were ready for letting at the end of the year.

Sanitary work is at a standstill in Stanningley for want of a main sewer. The district is thickly populated, and rapidly growing. I would ask the Council to hurry on as quickly as possible the sewerage of this district.

Private Streets, Sewered, &c., in 1898 :

St. Vincent Road	183 yards.
Brick Mill Road	86 „
Crawshaw Street	148 „

Sewage Purification.—Up to the end of the year little progress was made towards completing the larger works at Houghside. These works were designed to deal with over 12,000 of the present population. The Rivers Board, a central authority with extraordinary powers and impatient at any unavoidable delay, have been putting steadily increasing pressure on the Council with a view to hurrying on the construction of the works.

It is not well to disregard these friendly warnings.

The smaller works at Smalewell, dealing with a population of about 2000, have been in operation since 1896. The effluent is at times fairly good, but not by any means always so. I am informed that more attention to detail in working, and passing the effluent through the spare land below the filter beds, would probably give an entirely satisfactory result. However, even as it is, there is a vast difference for the better in the condition of the stream below the works compared with what it was before the works came into operation.

The manufacturers have nearly all completed the private works, tanks, etc., necessary for the removal of solids from their various trade effluents before discharging into the Council's sewers.

House Drainage.—Although the sewers and sewage works of the Waterloo district have been finished for some time only a small number of house drains were connected to the sewers, and those were joined in in consequence of something urgent cropping up and not as part of a general system. In 1898 the Council ordered the necessary connections to be made in the case of every house, and at the end of the year fair progress had been made with the connections.

I have urged before, and I would still further emphasise, the importance of skilled and honest supervision in respect to this work. It is safe to assume that it will not be executed properly unless it is carefully watched, and it is certain that if house drains are not properly constructed the health of the dwellers in the houses, and the pockets of the owners, will suffer sooner or later.

Bye-Laws, and Concreting Foundations of New Buildings.—The Bye-laws with respect to new streets and buildings adopted in 1897 have already been beneficial. Jerry-building, which the laxity of the old bye-laws freely permitted, has received a wholesome check.

The discretionary character of bye-law 10, which provides for concreting the foundations of new buildings only "where the nature of the ground or the dampness of the site renders such a precaution necessary" has caused some friction.

To guide the Sanitary Authority in dealing with cases under this bye-law I may say that all sanitary experts consider an impervious basement a sanitary essential as regards a healthy dwelling. Our great ruling and guiding central authority on sanitary matters, the Local Government

Board, has framed No. 10 model bye-law as follows : " Every person who shall erect a new domestic building shall cause the whole ground surface or site of such building to be properly asphalted or covered with a layer of good cement concrete, rammed solid at least six ^{inches} ~~feet~~ thick." It is hardly necessary to say that any bye-law framed by the Local Government Board is the result of high scientific knowledge combined with vast practical experience, and therefore this bye-law should have great weight. In Knight's Annotated Model Bye-laws the following occurs : " The sanitary advantages of this clause are considerable, residence on a damp subsoil as the foundation for a house has long been known to favour the prevalence of disease, such as pulmonary consumption, hence regulations to prevent the passage of dampness from the soil beneath houses into their interior are obviously desirable. All soils and rocks are more or less pervious. " Every year more and more is being learnt as to the injurious influence of admitting ground air into dwellings and this especially in thickly populated places." Sir Richard Thorne Thorne, the chief medical adviser to the Local Government Board, ascribes the decline of consumption, in a great extent, to " administrative measures, including the adoption of bye-laws for the erection of new buildings to secure greater dryness than that formerly obtained, the concreting of ground floors of dwellings, and the provision of damp courses in walls." Another expert writes : " Unless you see that your dwelling have underneath it a flooring of concrete, at least six inches in thickness, you will be certain to find such warmth as you obtain in your room sucking up moisture from the soil below, with a lowering of your general healthiness for outcome and consequence." The next quotations are from articles by G. P. Gordon Smith, and Keith S. Young, two widely known architects : " As regards the necessity for covering the site of a building with concrete, the sanitary advantages of this precaution are far more considerable than is commonly supposed, while the extra cost involved by it may be less appreciable than at first sight appears to be the case." I have heard of architects of decidedly less eminence who pooh pooh the value of concrete foundations, and, perhaps to propitiate their clients, object to the expense as needless, forgetting that their politic economy may expose the future inhabitants of the houses to expensive illness,

Beckside Hill and Delph Hill.—The condition of these places is discreditable to the town. By order of the Council in December, 1897, I made a special report (Houses of the Working Classes Act, 1890) on the insanitary state of Beckside Hill. So far nothing has been done for its improvement.

Private Streets and Footpaths.—The condition of the private streets is being steadily improved. Many of them that three or four years ago were as bad as bad could be, are now in good order. The same cannot be said for the public footpaths. The following quotations from the "Echo," a local newspaper, saves me the trouble of more fully going into the matter :

"As for the footpaths, well, every one seems to shirk the responsibility for their condition. Hence their generally disgraceful condition. It is surely somebody's duty to keep them in decent condition" * * * "And yet it is a very important one to thousands of working people who have to wade through the slush and wet on dark mornings and nights, when going to and from their work. We have not yet arrived at even decency, let alone perfection, in this matter."

Water Supply.—The water obtained from Bradford, with the exception of a few weeks in the Autumn when it was muddy from the presence of peat, was of good quality and did not act to a dangerous extent on lead pipes, see page 26.) It is now nearly seven years since I have heard of a case of lead poisoning in the town.

Three wells were closed during the year. They all supplied cowsheds and were suspiciously associated with cases of typhoid fever. They were replaced by pipe water.

Week Ending. 1897.	1898.				1892
	Hardness Degrees.	Alkalinity Parts per million, in terms of carbonate of lime.	Weekly Average Grains of Lead per Gallon.	Monthly Average Grains of Lead per Gallon.	Monthly Average Grains of Lead per Gallon.
January 1st			.04		
" 8th			.02		
" 15th	5.5	12.5	.04	.06	.45
" 22nd			.1		
" 29th			.1		
February 5th			0.5		
" 12th	5.4	12.6	.1		
" 19th			.05	.05	.33
" 26th			Trace		
March 5th			"		
" 12th			"		
" 19th	5.2	12.0	"	Trace	.60
" 26th			"		
April 2nd			.02		
" 9th			.02		
" 16th	5.2	15.57	Trace	Trace	.5
" 23rd			"		
" 30th			"		
May 7th			0.4		
" 14th	5.3	15	0.4	.04	.48
" 21st			0.1		
" 28th			0.8		
June 4th			.08		
" 11th			Trace	Trace	.65
" 18th	5.3	17	"		
" 25th			"		
July 2nd			"		
" 9th			"		
" 16th	5.2	17.5	"	Trace	.47
" 23rd			"		
" 30th			"		
August 6th			"		
" 13th			.08		
" 20th	5.2	17.5	.08	.04	.39
" 27th			.01		
Sept. 3rd			0.4		
" 10th			Trace		
" 17th	5.2	17.5	"	Trace	.22
" 24th			"		
October 1st			"		
" 8th			"		
" 15th	5.2	13.2	"	Trace	.27
" 22nd			"		
" 29th			0.5		
Nov. 5th			.17		
" 12th			.12		
" 19th	6.5	9.3	.07	.12	.24
" 26th			.12		
Dec. 3rd			.28		
" 10th			.17		
" 17th	7.0	13.0	.09	.14	.21
" 24th			.04		

Sale of Food and Drugs Acts.—Two samples of milk were purchased.—In both cases the County Analyst certified that the milk was of fair quality.

Health Lectures.—At the request of the Committee of the Mechanics' Institute, I gave the following short course of Lectures on Health subjects. The lectures were free, and illustrated with lantern slides. They were well attended:

October 10th — Cleanliness—Personal, Domestic, Municipal.

October 24th—Clothing in relation to health.

November 7th—Prevention of Infectious diseases.

November 21st—Small-pox and Vaccination.

Sanitary Staff.—Mr. Thos. Mooney, Cert. Assoc. San. Inst., was made Sanitary Inspector in April 1898, in succession to Mr. D. Hinchcliffe, who was appointed Surveyor and Sanitary Inspector to the Dorchester Rural District Council.

The re-arrangement of the duties of the officials is a matter that merits the consideration of the Council. At present the duties of the offices are mixed up and overlap in a way that impairs the efficiency of the work, and consequently is likely to injuriously affect the public health. The law, Sect. 189, Public Health Act, 1875, requires every Urban Sanitary Authority to appoint a fit and proper person as inspector of nuisances. This implies that the office is considered to be important, and that the proper performance of the duties of the office are necessary for the well-being of each district. The duties of a Sanitary Inspector as set out by order of the Local Government Board are so numerous that even in smaller places he has no time for any work except his own, whereas in a manufacturing district of the area and population of Pudsey, I doubt very much whether one man, whatever his energy or ability may be, could fully carry out his manifold duties.

For the information of the Council, I briefly give a list of some of the duties of an Inspector of Nuisances.

To superintend the scavenging of the district (2,091 privies, 1,156 ashpits, 77 dust-bins). (The efficiency and economy with which this important work is done depends upon the personal attention of the sanitary inspector.)

To systematically and regularly inspect the whole district and find out where nuisances exist.

To inquire into all nuisances, breach of bye-laws or regulations, &c., that are reported.

To make systematic house to house inspections.

To inspect all cowsheds, dairies, &c. (There are 72 in the district, and the awakening interest in the tuberculosis question will necessitate close attention to their sanitary condition. They should at least be visited once a quarter).

To inspect places where offensive trades are carried on.

To inspect factories and workshops.

Smoke inspection.

Food inspection, and particularly in slaughter-houses.

To take samples of food and drugs for analysis.

To inquire as to the cause of infectious disease, disinfecting, &c.

Making reports to Sanitary Authority, attending meetings, advising personally, writing letters, legal notices, &c., in respect of the abatement of nuisances.

Keeping regular records of all his work in proper books.

At present the Sanitary Inspector devotes a large share of his time to work that strictly belongs to the Surveyor's department, and the result, to put it plainly, is that he neglects, for want of time, many of the most urgent duties of his own office. But even if he had time to give up to the other work it is undesirable that he should do it, except as a subordinate of the surveyor, on whose shoulders the whole responsibility should rest. Under the existing arrangement the responsibility for, say, the amending of drainage, or the passing of drains, is a divided one, and if in the future anything goes wrong with the drains the sanitary authority will find it no easy task to allot the blame.

The present system is also bad inasmuch as the methods of officials are unlike, and different officials may have different standards of excellency; any inequality of this kind is soon scented out by men who wish to have "jerry" work passed, and, if they have a choice of inspectors to pass their work, they naturally will not select the official who has sufficient back-bone to enforce the regulations of the Council, and to safeguard the interests of the property owners who are paying for the work.

As another argument for each official sticking to his own department, it is also well to bear in mind that as a rule work is done best by the man who is accustomed to do it.

There is now no difficulty in entirely separating the offices of Sanitary Inspector and Surveyor, as the Council recently appointed a skilled assistant for the Surveyor, and are prepared to give any further assistance the increase of work may demand.

In this connection I should like to remind the Council of the importance of keeping accurate records of all drainage work. The Council, in 1897, passed a resolution that all drainage work when completed should be recorded on the 10.56 Ordnance Map. I understand that this is not regularly done, and have no hesitation in foretelling that this omission will cause serious inconvenience in the future.

Summary.—As there are reasonable grounds for expecting that Pudsey will soon — possibly before the presentation of another “Annual report”—be raised to the dignity of a Borough it seems a fitting time to refer to the sanitary improvement of the town. Up to ten years ago the sanitary state of the place was bad, but since then the authority have been steadily working for the promotion of the public health, and it is safe to say that the progress made in that direction by Pudsey is equal to if it does not surpass, that of most of the neighbouring towns. A general idea of what has been accomplished is shown by the following tables :

Sanitary measures adopted by the Sanitary Authority.

YEAR.	
1878	Recreation Ground Provided—at a cost of £1,665.
1883	Scavenging undertaken by the Sanitary Authority.
1887	Public Park Provided—at a cost of £4,750.
1891	Public Health Amendment Act, 1890, Part 3 Adopted.
1891	Isolation Hospital opened.
1892	Dairies, Cowsheds and Milkshops Order, 1885. Regulations made.
1894	Order of County Council—Division of District into Wards.
1895	Infectious Disease (Notification) Act, 1889, Adopted.
1895	Powers, duties, liabilities of the Burial Board taken over by the Council.
1897	Model Byelaws Adopted with respect to New Streets and Buildings.
1897	Baths and Washhouses Act, 1840, Adopted.
1897	Charge for Water used in Baths, Abolished.
1898	Charge for Water used for Flushing Water Closets, abolished.

Number of Nuisances Abated during the last Seven Years.

		1892.	1893.	1894.	1895.	1896.	1897.	1898.	Total
Order of Sanitary Authority.	Legal Proceedings	5				26		1	32
	Legal Notices	107	62	89	68	266	77	34	703
Preliminary Notices	Personal Arrangement	968	686	910	690	339	305	177	4068

Although so much has been done there is yet much employment for the pent up energy of the Council. The provisions of Refuse Destructors ; Public Slaughter Houses ; and Public Paths are, amongst other things, matters deserving of their consideration.

WM. LOVELL HUNTER,

Medical Officer of Health.

PUDSEY (YORKS).

METEOROLOGY FOR 1898.

(Observations taken at 9 a.m. (521 feet above sea-level).)

1898	Means at 9 a.m.			Extreme Temperatures.				Rain.			Degrees of Humidity.			
	Baro- meter uncor- rected.	Ther- mometer.		Shade.				Total Depth.	No. of wet days	Most in one Day.	Saturation—100.			
		Dry Bulb	Wet Bulb	Maximum		Minimum					High'st	Lowest	Range.	Mean.
				Deg.	Date	Deg.	Date							
Jan. ...	Ins. 29.80	Deg. 43	Deg. 41	Deg. 51	Date 21st	Deg. 32	Date 17th	Ins. 1.11	12	.27	100	71	29	87
Feb. ...	29.43	38	36	51	2nd	26	21st	1.34	17	.24	93	59	34	79
March	29.48	38	35	55	18th	30	7th	1.43	13	.24	100	63	37	81
April ...	29.47	46	43	63	9th	32	5th	2.63	12	.85	100	64	36	79
May	29.44	49	45	63	8th	36	13th	2.24	17	.54	100	52	48	75
June ...	29.56	56	52	71	18th	39	1st	2.26	14	.77	94	61	33	75
July ...	29.70	59	54	74	16th	47	20th	.89	11	.36	100	49	51	72
August	29.60	60	57	80	13th	47	24th	3.	16	.63	100	58	42	80
Sep. ...	29.69	58	54	76	18th	40	29th	.44	4	.34	100	65	35	82
Oct. ...	29.43	51	49	65	3rd	42	9th	3.95	18	1.02	100	80	20	91
Nov. ...	29.41	43	41	58	3rd	30	23rd	1.92	16	.50	100	74	26	90
Dec. ...	29.51	44	41	57	6th	28	31st	2.61	20	.73	100	67	33	85
Totals								23.82	170					
Means	29.54	48.7	45.6											81
Highest				80	Aug									
Lowest						26	Feb							

One Absolute Drought 13th to 28th September — 16 days.

One Partial Drought 29th August to 28th September — 31 days (.27 ins. rain).

FOUR FEET GROUND TEMPERATURE :—

January, 44°—43°.8—44°	July, 50°—53°
February, 44°—43°	August, 53°—52°.5—54°
March, 43°—41°	September, 53°.8—54°—53°
April, 41°—43°	October, 52°.8—50°.2
May, 43°—45°.5	November, 50°.2—47°.5
June, 45°.5—50°	December, 47°.2—45°

SANITARY INSPECTOR'S REPORT FOR 1898.

						Total for Year.
No of Complaints received					{ Full Ashpits Nuisances	91
						47
No of Houses, Premises, &c., inspected ...						245
No of Nuisances reported						80
No of Nuisances abated						273
No of Re-inspections, Works in Progress...						410 approx'.
Results of Inspections.	Orders issued for Sanitary Amendments ...					34
	Houses, Premises, &c., Cleansed and Limewashed ...					6
	Accumulations removed					11
	Animals removed, being a Nuisance ...					10
	Yards, Courts, &c., Cleansed					3
	Notices to Scavengers to Cleanse Ashpits ...					72
Cases of Overcrowding abated						4
	Privies	{	Altered ... ..	...	...	3
			New Provided ... ..	...	...	1
	Ashpits	{	Altered ... ..	...	...	4
			New Provided ... ..	...	...	1
Drains.	Length in feet					4880
	Trapped					13
	Disconnected					124
	Cleansed					3
	Ventilated					37
Regular Inspections.	Cowsheds					13
	Slaughter-houses					9
	Bakehouses					2
	Common Lodging-houses					5
	Factories and Workshops					3
Legal proceedings						1
Smoke Observations						3

THOS. MOONEY, Certif. Assoc. San. Ist.